Calendar

SEPTEMBER

- 11 Lansing-Michigan History Museum Aviation History Day - all types of current and historical aviation displays and information for all ages to enjoy. Call 517-373-1905 or 616-744-1379.
- Lansing-Michigan History Museum; 6-10p.m. Michigan Aviation Hall of Fame 13th Annual Enshrinement. Four Michigan aviation pioneers to be inducted. For information, call 517-886-1030 or 616-382-6555.

OCTOBER

Kalamazoo-Kalamazoo Aviation History Museum (Air Zoo) Fall Open House-FREE admission to the museum and flight center. Sponsored by Kalamazoo Aviation History Museum. Call 616-382-6555.

John Engler, Governor

MICHIGAN AERONAUTICS COMMISSION

John K. Boerema, Chair - Grand Rapids Alice J. Gustafson, ViceChair -Pontiac Lowell E. Kraft, Pigeon Joseph M. Pietro, Ishpeming Arnold P. Saviano, Harbor Springs

James R. DeSana, Director Michigan Department of Transportation

Capt. Steven Herner Michigan State Police

Brigadier General Ronald L. Seely Michigan Department of Military Affairs

Guy Gordon Michigan Department of Natural Resources

William E. Gehman, Director Michigan Aeronautics Commission

Barbara Burris Executive Assistant to the Commission

Kenneth Schaschl - Editor

MDOT Specialized Technology/Graphics - Graphic Design



On Sunday, August 29, 1999, the Pontiac, Michigan, Air Traffic control tower is again sponsoring its annual Open-House. The fourteenth annual event will run from 10 a.m. to 5 p.m. and will attract 100,000 people and between 3,200 to 4,000 aircraft.

The open house is free to the public and is intended to make the public more aware of the importance of military and general aviation to the surrounding communities.

The military and many operators have offered superb support for this event with static displays and fly-bys. Due to the proximity to populated areas, acrobatic and performance demonstrations are prohibited. For information call Jerry Drew, Open House coordinator at 248-868-0057.

The Bureau of Aeronautics will soon be requesting proposals for management services, and/or maintenance services, and/or fixed base operations at the Grayling Army Airfield. For additional information, contact Tom Krashen, Bureau of Aeronautics at 517-335-9977.



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COMMISSION ACTION

The Michigan Aeronautics Commission met in Ann Arbor on May 20, 1999. Items acted upon by commissioners included approval of \$12.3 million for airport improvements across the state.

Some projects have federal, state, and local funding, while others are funded from state and/or local sources alone. Commission approval for federally funded projects authorizes state participation, subject to issuance of a federal grant. Federal and state dollars for airport development are primarily from restricted, user generated funds. The primary sources of revenue are aviation fuel and passenger taxes, as well as aircraft registration fees.

Following are approved projects:

GRANTS

ADRIAN

Lenawee County Airport - an allocation of \$555,556 for the first phase of land acquisition for a project to extend Runway 5/23. The proposed budget consists of \$500,000 federal and \$55,556 local funds.

BATTLE CREEK

W.K. Kellogg Airport - an allocation of \$70,000 to rehabilitate Taxiway G. The proposed budget consists of \$63,000 federal, \$3,500 state, and \$3,500 local funds.

DOWAGIAC

<u>Dowagiac Municipal Airport</u>an allocation of \$15,000 for approach clearing. The proposed budget consists of \$13,500 state and \$1,500 local funds.

FLINT

Bishop International Airport an allocation of \$4,746,720 to rehabilitate Runway 18/36 and Taxiway A. The proposed budget consists of \$4,272,048 federal, \$86,436 state, and \$388,236 local funds.

GAYLORD

Otsego County Airport - an allocation of \$250,000 to purchase a snow plow. The proposed budget consists of \$225,000 federal, \$12,500 state, and \$12,500 local funds.

GREENVILLE

Greenville Municipal Airportan allocation of \$635,000 to extend Runway 9/27 to 4200 feet and construct a parallel taxiway. The proposed budget consists of \$571,500 federal, \$31,750 state, and \$31,750 local funds.

GWINN

<u>Sawyer Airport</u> - an allocation of \$1,224,000 to rehabilitate lighting on the parallel taxiway, for hangar rehabilitation, and for crack repair on Runway 1/19. The proposed budget consists of \$1,101,600 federal, \$40,400 state, and \$82,000 local funds.

KALKASKA

Kalkaska Airport - an allocation of \$525,000 to pave Runway 10/28. The new runway will be 3500 feet long and 75 feet wide. The proposed budget consists of \$219,192 federal and \$417,688 local funds.

LANSING

 $\frac{Capital\ City\ Airport}{allocation\ of\ \$322,000\ to\ relocate}\ the\ rental\ car\ parking\ area.\ The$

proposed budget consists of \$289,800 federal, \$16,100 state, and \$16,100 local funds.

MANISTEE

Manistee County-Blacker Airport - an allocation of \$2,000,000 to relocate the VOR and to install an Instrument Landing System. The proposed budget consists of \$1,800,000 federal, \$100,000 state, and \$100,000 local funds.

ROMEO

Romeo State Airport - an allocation of \$120,000 for pavement repair, to create an Airport Master Plan, and to update the Airport Layout Plan. The proposed budget consists entirely of state funds.

SAULT STE. MARIE

Chippewa County Airport - an allocation of \$1,700,000 to construct a new Runway 9/27. The proposed budget consists of \$1,530,000 federal, \$85,000 state, and \$85,000 local funds.

STANDISH

Standish Industrial Airport - an allocation of \$50,000 for crack repairs on Runway 9/27. The proposed budget consists of \$45,000 state and \$5,000 local funds.

LOAN

SANDUSKY

Sandusky City Airport - loan of \$40,000 in state funds to supplement the local share of a project to rehabilitate the runway.

EAA Air Venture The view from the tower

by Christine E. Hartges, Saginaw ATCT

As most pilots, I will always remember the first time I flew into what was then known only as "Oshkosh." I was a teenager in 1980 when my dad and I first flew his Cessna 182 to the convention. I was astounded with the volume of aircraft while trying to understand the controller's instructions. My short time as a student pilot at Capital City Airport in Lansing, Michigan, had not prepared me forthis volume of traffic. What I did not know, was that one day I would be one of those rapid fire voices on the radio at Oshkosh.

The one place everyone recognizes at Oshkosh is the control tower. Fifty-one weeks a year it is operated by six contract (non-FAA) controllers. During the 1998 EAA AirVenture, Oshkosh tower recorded 23,825 operations. Consequently several days prior to the convention these controllers are joined by 64 FAA controllers from surrounding states. These controllers, based at Wittman Airport, can be recognized by their trademark pink shirts and hats, a color chosen to make them most visible to pilots.

The air traffic operation into Oshkosh is unlike any other. To manage a volume of traffic greater than Chicago O'Hare, the air traffic and airport are divided into smaller segments. Controllers work in teams of four and rotate daily work assignments among these segments. The most visible assignment is the control tower. This is the voice that says "cleared to land on the green dot," and "start your base now." While one controller is talking on the frequency, three others are watching downwind, base, final and the runway, often telling the "voice" what instructions to give the arriving aircraft. As the air traffic increases, another team of controllers will begin operations on the second runway utilizing a separate frequency. When all support positions in the tower are utilized, as many as 14 controllers are working in the control tower at one time.

Two more teams of controllers are stationed at the approach end of each runway. They work on a flat platform trailer equipped with a podium and radios, all made mobile by a John Deere lawn tractor. This team

will separate the departures from the arrivals using a select frequency and orange wands (note the arrivals may not be on this frequency, but under control of the voice in the tower). This team is the one that mixes the departures with the arrivals and pattern traffic.

If you have flown VFR to Oshkosh, you've heard of Fisk, Wisconsin. Fisk is a small town southwest of the airport that is yet another location for controllers. Located high on a Wisconsin hilltop, next to a white farmhouse, they sit at a folding table using a portable radio and binoculars to start sequencing arrivals to the airport. They instruct aircraft inbound toward Fisk to fly single file, at specified speeds and altitudes, and initiate holding around Rush Lake. They also assign a landing runway and frequency change to the tower controller.

On the south end of Lake Winnebago is the Fond Du Lac Airport. Normally an uncontrolled airport, a team of nine FAA controllers staff a temporary control tower during EAA Air Venture. In 1998, Fond Du Lac had 8,633 aircraft operations during the week of the convention. They do not work on the airport surface with orange wands, but can often be seen working from the catwalk of the tower in their navy blue shirts.

Before and during the convention, air traffic increases greatly at all air traffic facilities surrounding Oshkosh for hundreds of miles. The controllers that remain at the Centers, Approach Controls, Towers and Flight Services may not wear pink shirts, but are truly the first link to the important job of safe passage for pilots flying to their first "Oshkosh."

Fifteen Air Traffic Controllers from Michigan control towers will be supporting EAA AirVenture 1999.

They are:

Jeffery Barton - Muskegon ATCT
Jerome Drew - Pontiac ATCT
Duane Eidenier - Grand Rapids ATCT
David Flynn - Lansing ATCT
Christine Hartges - Saginaw ATCT
Robert Hissom - Pontiac ATCT
Jerry Hough - Grand Rapids ATCT
Henry Kidd - Pontiac ATCT
Doug Jordan - Traverse City ATCT
Tim Mazurek - Ann Arbor ATCT
Mark Meuwisson - Detroit ATCT
Kenneth Milling - Ann Arbor ATCT
David Swanson - Kalamazoo ATCT
Richard Taylor - Lansing ATCT
Ray Thyfault - Kalamazoo ATCT

Christine is a CFII, and owns a Citabria. She has been an Air Traffic Controller at MBS ATCT since 1985 and has worked at Oshkosh during four conventions.



Michigan controllers supporting EAA AirVenture 1998 were: back row l. to r. Jill Wurdell - ARB, Frank Mervyn - MBS, Mark Meuwisson - DTW, Robert Hissom - PTK, Tim Mazurek - ARB, Duane Eidenier - GRR, front row l. to r. Mary Nestell - LAN, Henry Kidd - PTK, Christine Hartges - MBS, Dennis Nash - MKG, Richard Taylor - LAN, Davyd Swanson - AZO.

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Aviation In-formation

In testimony before the U.S. House of Representatives Transportation and Infrastructure Subcommittee on Aviation, Michigan Aeronautics Director, William E. Gehman, called for an increase in federal funding for aviation infrastructure nationwide. Gehman, who also chairs the National Association of State Aviation Officials (NASAO), presented committee members with Michigan's five-year aeronautics plan. The plan outlines 265 projects, proposed at 100 public-use airports, through 2004. In preparing for action before the full House, subcommittee chair, Vernon Ehlers of Grand Rapids, asked Gehman to highlight nationwide needs, especially those of general aviation. Michigan was selected as one of the best states to exemplify the broad range of aviation needs facing the country over the next century.

Shortly after Gehman's subcommittee testimony, the Aviation Investment Reform Act for the 21st Century (AIR-21) was passed by the full U.Š. House of Representatives. Aviation advocacy organizations across the country are lauding this action. NASAO is among those organizations, and has worked hard to ensure passage of this legislation. The Bill, which gives the FAA \$56 billion over the next five years, includes a provision that all revenue from the Aviation Trust Fund be dedicated for aviation uses. In years past, much of the trust fund money was diverted to other programs or added to the federal budget surplus. Included in the bill are provisions to allow airports to double their Passenger Facility Charge (PFC) to \$6 for local projects, require the hiring of more air traffic controllers, and establish procedures to lessen noise from air tours over national parks. The current system of allocating takeoff and landing "slots" at certain high-density airports would be eliminated at Chicago O'Hare in 2002, and at JFK and LaGuardia airports in New York in 2007. Additional flights to under-served airports would also be allowed at Washington National Airport. Finally, funding for the Airport Improvement Program would be increased from \$1.9 to \$4.3 billion. The Bill must still be approved by the Senate and signed by President Clinton, who has threatened a veto.

According to the National Air Transportation Association (NATA), the aviation industry is facing a crisis due to a critical shortage of qualified people to fill technical jobs. Among those career areas in which skilled workers will be needed are aircraft maintenance, avionics (aviation electronics), aircraft charter, and flight instruction. NATA President Jim Coyne warned of a stifling of the resurgence of general aviation if a supply of skilled workers is not developed. The U.S. Department of Labor has forecast the need for 12,000 aviation mechanics a year to fill new positions. Several Michigan colleges and universities offer aviation technical training, including, Western Michigan University, Lansing Community College, Northern Michigan University, Northwestern Michigan College, Jackson Community College, Andrews University, Macomb Community College, Southwestern Michigan College, and Wayne County Community College in cooperation with the B.O. Davis High School in Detroit.

Pilots who give rides for compensation at charitable events have been given some relief from a burdensome and often ignored rule. Commercial pilots who give rides for compensation are not required to hold an air carrier certificate under Part 135 of the Federal Aviation Regulations (FAR) as long as they begin and end at the same airport and remain within 25 statute miles. However, those pilots (and other personnel) are required to comply with the FAR Part 135 drug and alcohol testing requirements. This means that in order to give rides (for money) at a dawn patrol, county fair, or other event, the pilot(s), and mechanic(s), at a minimum, must be enrolled in an FAA approved drugtesting program. FAA Administrator, Jane Garvey, has announced that the agency will grant exemptions to this rule for rides given at charitable events. This exemption is meant to provide immediate relief until a revision to the FARs can address the issue permanently. Pilots can apply

by fax. Requests should be faxed to the FAA, Attention: Cherie Jack at 202-267-5075. Approval can be expected within two weeks.

Two new Automated Weather Observation Systems (AWOS) are being installed by the Bureau of Aeronautics this year. At Mt. Pleasant, a system should be commissioned by late summer. The second installation is planned for Harbor Springs later this fall. Additionally, two existing AWOS locations have been assigned new frequencies: at Mason, the new frequency will be 119.425 Mhz, and at Sturgis it will be 121.325. This action is being taken to help alleviate the growing problem of frequency interference.

The Bureau of Aeronautics is active in promoting and fostering air service throughout the state. The program's stated goal is to match a community's level of air service with the maximum level of service it will profitably support. As a result of these efforts, airlines serving several airports have recently added or enhanced air service.

- At Detroit Metropolitan Airport, Lufthansa began daily non-stop service to Frankfurt on March 28; Northwest began non-stop service to Anchorage on May 1; and Northwest and its commuter partner, Mesaba Aviation, began service to Portland, Maine with three daily non-stops.
- At Grand Rapids, US Airways Express (Chautauqua Airlines) has started direct service to Washington, Dulles airport using 34-passenger Saab 340 aircraft. On August 26, American Eagle will begin non-stop ERJ-145 regional jet service to Dallas/Ft. Worth.
- On June 15, Mesaba Aviation (operating as Northwest Airlink) began non-stop service from Traverse City to Minneapolis using their new 69 passenger, four engine Avro RJ85 jet.
- Finally, Milwaukee-based Skyway Airlines, which is the commuter partner for Midwest Express Airlines, was awarded the Federal Aviation Administration Certificate of Excellence Diamond Award. The award is given in recognition of exemplary maintenance practices.

NEW MEMBER JOINS STATE AERONAUTICS COMMISSION

Capt. Steven Herner has been named as the State Police representative to the Michigan Aeronautics Commission by director Col. Michael Robinson. He Replaces Capt. Jeffrey Steffel, who retired in May. Herner, who was promoted to the rank of Captain in May, is commanding officer of the Special Operations Division, which encompasses the Traffic Services, Aviation, Prevention Services, and Operations Sections. Prior to his promotion, he served as an inspector at the fifth district headquarters in Paw Paw. Capt. Herner, who is a native of Alpena, holds a bachelor's degree in criminal justice from Lake Superior State University. He has been with the department since 1978.

The State Police representative is one of four statutory members of the commission. The others are the directors of the state departments of Transportation, Military Affairs, and Natural Resources.



Capt. Steven Herner

MICHIGAN AIRPORTS SURVEYED ABOUT "Y2K" PREPAREDNESS

The Bureau of Aeronautics (AERO), and other Michigan Department of Transportation (MDOT) agencies, have been working to increase awareness of the Year 2000 ("Y2K") computer bug. As this problem could disrupt critical airport systems, AERO has focused its efforts upon educating airport sponsors about the problem and suggesting approaches to developing a Y2K remediation plan.

Background

The problem materialized when computer programmers, in an effort to save memory, abbreviated computer codes by using only the last two digits of the year. For example, the year "1999" would be recorded by the computer as simply "99." Systems that

suffer from this programming bug may distinguish the year "2000" as "1900" and possibly shut down or otherwise malfunction. Computer microprocessors may be found in a wide variety of airport systems including security access controls, fuel distribution systems, communication equipment, and airfield lighting.

Addressing the Problem

AERO recently distributed Y2K "toolkits" to 117 public use airports throughout the state. The toolkits contained a wealth of information on the Y2K computer problem, and recommended approaches to inventory and remediate non-compliant systems.

In addition, AERO requested that these airports complete a survey to

help determine their Y2K compliance status. As of June 1st, approximately 70% of the airports have responded to the survey. Preliminary results indicate that 92 percent of the airports are informed about Y2K and a majority have developed a plan to address their Y2K issues. Of the airports indicating Y2K problems, nearly half have developed a contingency plan.

How can I learn more about Y2K?

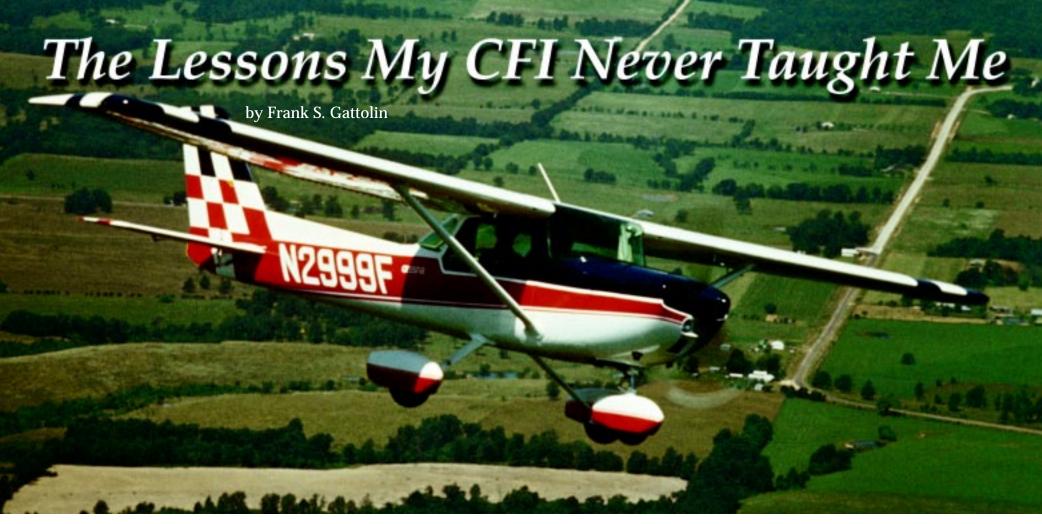
Airport sponsors interested in learning more about the Y2K problem are encouraged to visit AERO's website at: http://www.mdot.state.mi.us/aero/. The website contains Y2K links with particular emphasis on airports and aviation. If you need further information, please contact Matt Brinker at 517-335-9918.

The Bureau of Aeronautics (AERO), and the Federal Aviation Administration have signed a Memorandum of Understanding. Under the agreement, the Detroit and Grand Rapids Flight Standards District Offices (FSDO) and AERO will increase cooperative efforts to respond to the needs of aviation safety in Michigan. The document outlines sixteen areas of shared goals and emphasises the commitment of both organizations to improve aviation safety. These cooperative efforts include: sharing and ments, and flight instructor and mechanic recurrent training programs.



dissemination of information, safety seminars and public programs, preparation and distribution of safety information, mailing of safety announcements, and flight instructor and me-

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art 61 of the Federal Aviation Regulations (FARs) specify the training re quirements to acquire a pilot certificate or rating. The corresponding Practical Test Standards (PTS) specifically state the minimum levels of proficiency needed to meet those requirements. Part 61 also lists the recurrent training guidelines to continue to act as pilot-in-command. These minimums, however, often *do not* specify the content of the training or a level of proficiency that a pilot must achieve. Ultimately, the certified flight instructor (CFI) who provides the recurrent training decides the scope and detail of the instruction.

Ideally, the pilot and CFI will discuss the pilot's needs, and make the recurrent training a productive and positive experience. Unfortunately, too many pilots are reluctant to discuss their perceived deficiencies with the CFI, assuming that their instructor will provide adequate instruction. Other pilots (and often the instructors they hire) will opt for only the legal minimum of training. After the training, these pilots may be legal to fly—but are these legal minimums enough to be safe and proficient?

Pilots offer many reasons for avoiding "in-depth" training. Perhaps it is a matter of cost. Others may lack confidence because they know their skills are "rusty." Still others, simply resist the challenge. Alarmingly, some pilots feel that they do not need additional training because their skills are superior. For whatever reason, failing to get adequate recurrent training may eventually have dire consequences. The following accident investigation illustrates the pilot's responsibility in maintaining proficiency, finding a competent flight instructor, and "taking charge" of the training process.

The accident airplane departed a sod runway that was 2,600 feet long. The aircraft was properly loaded and had ten degrees of flaps extended. Witnesses said the airplane was about 100 feet above the ground when it rolled to the left, became inverted, and pitched down. It descended vertically and rotated almost one full turn before impacting the ground and exploding. Four people died in the accident

During the investigation, no anomalies were found with the airframe, flight

control system, or engine that would have prevented flight. Nothing mechanical could have caused an uncommanded loss of control that the pilot could not have prevented. The weather was clear, the winds were light, and the density altitude was about 1,000 feet. An autopsy and toxicological examination showed that the pilot did not have any incapacitating problems that would have caused him to lose control of the airplane.

For whatever reason, failing to get adequate recurrent training may eventually have dire consequences.

Examination of the accident pilot's logbook was revealing. The pilot's total time was 238.5 hours. He accomplished all of his primary training with the same flight instructor. From the beginning, there appeared to be little continuity in his training. To illustrate this, his logbook had only two entries where the word "stall" appeared. The first time "stall" appeared was the logbook entry for his third lesson--the entry simply stated,

"Intro to stalls." That lesson lasted 1.2 hours, and the CFI also documented the following items: "4 basics" [presumably, climbs, descents, straight and level, and turns], slow flight, 45° turns [presumably, steep turns with 45 degrees of bank], and 3 takeoffs and landings." Imagining how this CFI could teach so much material, in such a short time, is difficult.

"Stall" appeared a second time just before the CFI recommended the pilot for his private pilot practical test. The pilot received the recommendation with just 43.8 hours total time. (An applicant for a private pilot certificate, with an airplane category and single-engine class rating, must log a minimum of 40 hours of flight time.)

An examination of the primary instructor's logbook was equally revealing. It showed only his student's names in the logbook entries. He made no attempt to document the specific instruction that they accomplished in each lesson. The logbooks of the CFI's other students showed a similar pattern of very little stall training and no "building block" method of teaching. During an interview

with the instructor, the investigator asked about the type of stalls he taught the accident pilot. His reply was simply, "What the regulations required." FAR Part 61 and the Practical Test Standards are very specific regarding the performance of stalls and the proficiency required for each type. Astonishingly, further questioning revealed that the CFI was unable to discuss anything other than a power-off stall.

Another interesting aspect of the accident pilot's logbook was that he completed a flight review just two days before the accident. The experienced CFI administering the review had never flown with the accident pilot. He said he spent about one hour on the ground asking questions involving the GPS, FAR Parts 61 and 91, and night flying. During the flight portion (that lasted 30 minutes), the CFI asked the accident pilot to demonstrate only a power-off stall, reasoning that it would be sufficient for the flight review. He observed that the accident pilot had problems recognizing and recovering from the stall. The CFI reviewed power-off stall recovery techniques and endorsed the accident pilot's logbook for the recurrent training. His logbook entry stated, "Satisfactorily completed . . . "

The cause of this accident seems obvious. Stall training was not foremost on the minds of the CFI who did the primary training, the CFI who did the flight review, or the accident pilot. Consequently, the accident pilot paid the ultimate price. This accident serves to prove the importance of complete and thorough primary training. Knowledge of aerodynamics, and piloting skill in the basic flight maneuvers, could have prevented this accident.

All pilots, student or certificated, have a personal obligation to develop and maintain *proficiency*—not merely to stay legally current. In addition, all pilots have a responsibility to take a more active role in their training. This responsibility begins with reading and understanding what the Federal Aviation Regulations, the Practical Test Standards, and the aircraft's Pilot Operating Handbook require. The responsibility extends to choosing a professional and dedicated flight instructor.

A dedicated flight instructor is not one with 5,000 hours of dual given. There

are many, many "younger" instructors who are well organized, articulate, and dedicated. The instructor who is personable and interested in you and your growth as a pilot, who has a plan for you and your training and who can explain aerodynamics and aircraft operations is the one you should consider.

Ask questions and ask for demonstrations. Expect your instructor to know about aircraft performance, basic and advanced flight maneuvers, and their related aerodynamics. It is your right to know about the instructor's skills and credentials. Patrick Veillette's article, "Lessons to Unlearn," in the January 1999 issue of *Aviation Safety*, lists several questions to ask your CFI.

- 1. Where did you get your initial CFI training?
- 2. What is your background?
- 3. What are your flying experiences?
- 4. Where and how often do you get re current training?
- 5. What materials do you read for your professional education?
- 6. What other professional activities are you engaged in?

Consider the answers to these questions and determine if the instructor will meet your goals and expectations. In addition, always choose a CFI whose explanations and demonstrations are understandable. Understanding leads to applying the knowledge to flying the airplane. Choose a CFI who demands positive, coordinated airplane control throughout each flight maneuver, and insists on proper airmanship and habit patterns. Seek a CFI that knows about situational awareness and cockpit resource management, and can teach these important skills. A professional attitude, and a more active role in your training, will help you become a safer and more skilled pilot.

Mr. Gattolin holds a Commercial Pilot certificate with 11,000 hours flight experience. He also holds CFI and AIGI certificates with over 8,000 hrs. classroom instruction. Mr. Gattolin has been a school teacher and a corporate pilot. For the past 12 years he has been a safety investigator for the National Transportation Safety Board.

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